Renewable Energy Question 33: *How does Michigan's RPS compare with other states as a percentage of total electric load?*

Executive Summary

1. Renewable portfolio standards (RPSs) in some states, unlike Michigan, do not apply to all types of providers and, therefore, the percentage target applies to a subset of the state's total electric load. When comparing RPSs among states, it is useful to adjust the target to account for these and other differences, as applicable, so that the target can be stated as a percentage of the state's total electric load. This allows for a more accurate comparison.

2. Using this approach, Michigan's 10% RPS is in line with states with a 2015 goal. Most states have longer compliance timelines (for example, 2020 or beyond instead of 2015) and/or had higher amounts of existing renewable energy resources that count toward their target. Michigan set a near-term, aggressive RPS, while allowing for review of costs and performance under PA 295 of 2008 before making modifications to extend or expand the target beyond 2015.

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When comparing RPSs, it is important to consider the applicability to various types of providers, namely investor owned utilities (IOUs), municipally owned utilities, electric cooperatives, and alternative energy suppliers (AESs). Certain types of entities may be exempt or there may be a threshold for a minimum number of customers for the standard to apply. In Illinois, for example, renewable standards apply to IOUs with at least 100,000 customers. These details are important when evaluating the stated percentage because an RPS does not necessarily cover the entire state's load. In addition, in states such as Colorado, Illinois, Minnesota, Ohio, Oregon, and others, there are different targets for different providers or types of providers. For example, the Illinois RPS of "25% by 2025" equates to 16.5% statewide because Illinois exempts municipal utilities and cooperatives and has a lower standard for AESs. Minnesota's standard is adjusted to reflect the higher standard applicable to one utility, Xcel. Exhibit 1 shows the adjusted standard if the RPS were based on the state's total load, and provides a more accurate comparison among states.

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The simple average of the RPS percentage targets, using the adjusted statewide percentages shown below, is 17%. Michigan's 10% target is in line with states with a 2015 goal. New York has a 2015 deadline like Michigan, but the state had a large percentage of existing renewable energy (a baseline of 19% when the state first put in place the renewable requirement in 2004). The *new* renewable generation required in New York is about 8%. Several states have a higher percentage than Michigan but the target applies in later years, typically in the 2020–2030 time frame. A few states, namely California, Colorado, Hawaii, Illinois, and Minnesota, have very aggressive long-term targets, even after factoring in existing renewable energy that counts toward the standard.

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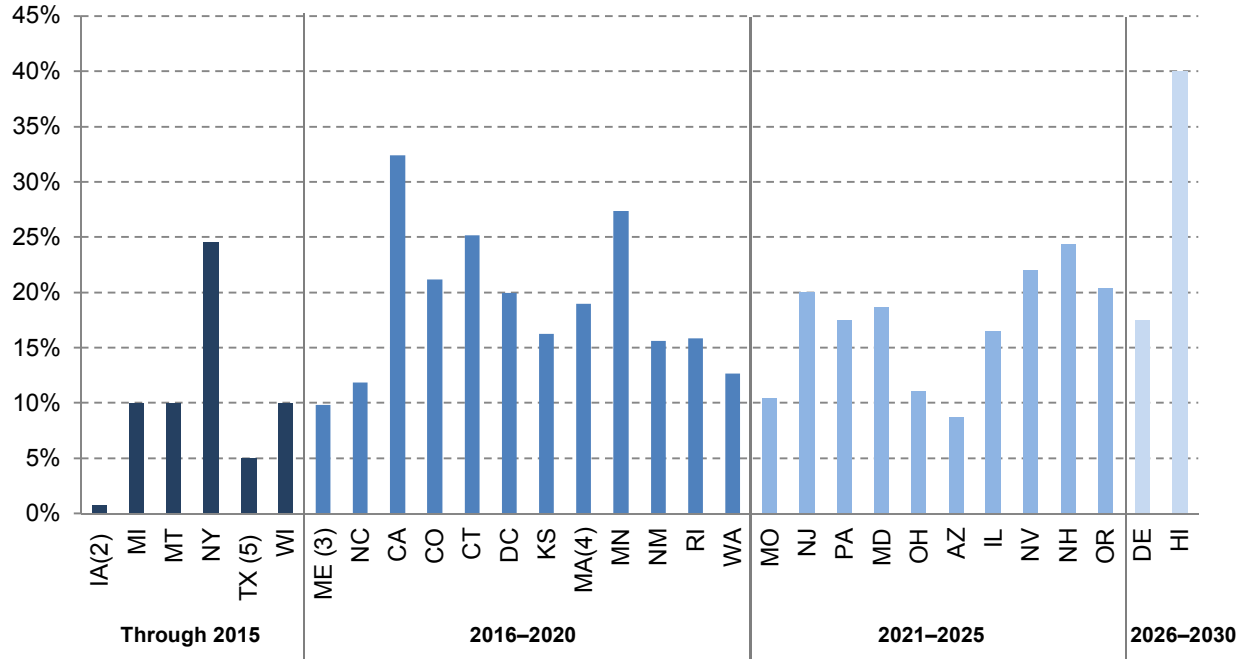
EXHIBIT 1. State RPS, Adjusted for % Total Sales



	Standard	Date	% Load	Adjusted Standard – State Equivalent
Arizona	15%	2025	58.5%	8.8%
California	33%	2020	98.2%	32.4%
Colorado		2020		21.2%
IOUs	*30%*	*2020*	*58.7%*	*17.6%*
Co-ops and large munis	*10%*	*2020*	*35.6%*	*3.6%*
Connecticut	27%	2020	93.4%	25.2%
Delaware	25%	2026	70.0%	17.5%
District of Columbia	20%	2020	100.0%	20.0%
Hawaii	40%	2030	100.0%	40.0%
Illinois		2025		16.5%
IOUs	*25%*	*2025*	*43.2%*	*10.8%*
AES[1]	*12.5%*	*2025*	*45.7%*	*5.7%*
Iowa[2]	1%	2000	75.7%	0.8%
Kansas	20%	2020	81.5%	16.3%
Maine[3]	10%	2017	98.3%	9.8%
Maryland	20%	2022	93.4%	18.7%
Massachusetts[4]	22.1%	2020	86.0%	19.0%
Michigan	10%	2015	100.0%	10.0%
Minnesota		2020/2025		27.4%
Xcel	*30%*	*2020*	*47.8%*	*14.3%*

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	Standard	Date	% Load	Adjusted Standard – State Equivalent
Other	*25%*	*2025*	*52.2%*	*13.1%*
Missouri	15%	2021	70.0%	10.5%
Montana	15%	2015	66.6%	10.0%
Nevada	25%	2025	88.2%	22.1%
New Hampshire	24.8%	2025	98.2%	24.4%
New Jersey	20.4%	2021	98.3%	20.0%
New Mexico		2020		15.6%
IOUs	*20%*	*2020*	*67.7%*	*13.5%*
Co-ops	*10%*	*2020*	*20.8%*	*2.1%*
New York	29%	2015	84.7%	24.6%
North Carolina		2018/2021		11.9%
IOUs	*12.5%*	*2021*	*75.2%*	*9.4%*
Co-ops and munis	*10%*	*2018*	*24.8%*	*2.5%*
Ohio	12.5%	2024	88.6%	11.1%
Oregon		2025		20.4%
Large utilities	*25%*	*2025*	*74.6%*	*18.7%*
Small utilities	*10%*	*2025*	*10.2%*	*1.0%*
Small utilities (<1.5% state's load)	*5%*	*2025*	*15.2%*	*0.8%*
Pennsylvania	18%	2021	97.3%	17.5%
Rhode Island	16%	2020	99.3%	15.9%
Texas[5]	5%	2015	n/a	5.0%
Washington	15%	2020	84.7%	12.7%
Wisconsin	10%	2015	100.0%	10.0%

SOURCE: Public Sector Consultants Inc., 2013, based on data from Database of State Incentives for Renewables and Efficiency, January 2013.
NOTES:
[1] AESs are only required to meet 50% of standard but can elect to do 100%.
[2] Electricity sales in Iowa are 45,445,269 MWh; 105 MW in high-quality wind area (40% capacity factor) would be expected to produce 367,960 MWh per year, equivalent to 1% renewable energy. Iowa has over 4,000 MW of installed capacity, far exceeding the 105 MW minimum.
[3] This applies only to new renewable energy projects. Maine had a standard of 30% by 2020, which included existing renewable resources. Maine had a large percentage of existing hydroelectric that qualified.
[4] Massachusetts has a goal of 15% by 2020 for new renewable resources, and this increases 1% annually thereafter.
[5] Texas' requirement of 5,880 MW by 2015 equates to approximately 5% of the state's electric load. Texas has already surpassed this goal with over 10,000 MW installed.